doped $M^{III}N$, and $M^{III}N$ alloys and compounds containing greater than 50% M^{III} and N.

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19. (Amended) The method according to claim 59 wherein the $M^{III}N$ article has a diameter of approximately 2 inches or greater and a thickness of approximately 1 mm or greater.

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20. (Amended) The method according to claim 59 wherein the template material is removed by a removal technique selected from the group consisting of polishing, chemomechanical polishing, laser-induced liftoff, cleaving, wet etching, and dry etching.

21. (Amended) The method according to claim 59 comprising the step of cutting a wafer from the $M^{III}N$ article.

22. (Amended) The method according to claim 59 comprising the step of preparing a surface of the $M^{III}N$ article for epitaxial growth thereon.

23. (Amended) The method according to claim 59 comprising the step of depositing an epitaxial layer on the $M^{III}N$ article.

24. (Amended) The method according to claim 59 comprising the step of forming a device on the $M^{III}N$ article.

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32. (Amended) The method according to claim 62 wherein the additional reactant species are deposited by a technique selected from the group consisting of physical vapor deposition, sputtering, molecular beam epitaxy, atmospheric chemical vapor deposition, low pressure chemical vapor deposition, plasma-enhanced chemical vapor deposition,

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metallorganic chemical vapor deposition, evaporation, sublimation, and hydrid vapor phase epitaxy.

33. (Amended) The method according to claim 62 comprising the step of cutting a wafer from the bulk $M^{III}N$ article.

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37. (Amended) A bulk single-crystal $M^{III}N$ article produced according to the method of claim 59 wherein the article has a thickness of approximately 50 microns or greater.

38. (Amended) A single-crystal $M^{III}N$ article produced according to the method of claim 59, wherein the article is in wafer form having a thickness ranging from approximately 50 microns to approximately 1 mm.

39. (Amended) A single-crystal $M^{III}N$ article produced according to the method of claim 59, wherein the article is in boule form having a diameter of approximately 2 inches or greater and a thickness ranging from approximately 1 mm to greater than approximately 100 mm.

40. (Amended) A method for producing a single-crystal $M^{III}N$ article comprising the steps of:

(a) providing a template material having an epitaxial-initiating growth surface;

(b) using a sputtering apparatus comprising a non-thermionic electron/plasma injector assembly to produce a Group III metal source vapor from a Group III metal target;

(c) combining the Group III metal source vapor with a nitrogen-containing gas to produce a reactant vapor species comprising Group III metal and nitrogen; and

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(d) depositing the reactant vapor species on the growth surface to produce a single-crystal $M^{III}N$ layer thereon.

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44. (Amended) A bulk single-crystal $M^{III}N$ article produced according to the method of claim 40 wherein the article has a thickness of approximately 50 microns or greater.

Please add the following new claims 57– 67:

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57. (New) The method according to claim 1 wherein the $M^{III}N$ layer has a diameter of approximately 0.5 inch or greater.

58. (New) The method according to claim 1 wherein the $M^{III}N$ layer is provided in a form selected from the group consisting of intrinsic $M^{III}N$, doped $M^{III}N$, and $M^{III}N$ alloys and compounds containing greater than 50% M^{III} and N.

59. (New) The method according to claim 1 comprising the steps of continuing to deposit the reactant vapor species on the growth surface whereby the $M^{III}N$ layer attains a thickness sufficient to enable removal of the template material, and removing the template material to provide a free-standing, single-crystal $M^{III}N$ article.

60. (New) The method according to claim 59 wherein the $M^{III}N$ article has a thickness of approximately 50 microns or greater.

61. (New) The method according to claim 60 wherein the $M^{III}N$ article has a diameter of approximately 0.5 inch or greater.

62. (New) A method for producing a bulk single-crystal $M^{III}N$ article comprising the steps of:

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(a) providing a template material having an epitaxial-initiating growth surface;

(b) sputtering a Group III metal target in a plasma-enhanced environment to produce a Group III metal source vapor;

(c) combining the Group III metal source vapor with a nitrogen-containing gas to produce a reactant vapor species comprising Group III metal and nitrogen;

(d) depositing the reactant vapor species on the growth surface to produce a single-crystal $M^{III}N$ layer thereon; and

(e) using the single-crystal $M^{III}N$ layer as a seed crystal to grow a bulk $M^{III}N$ layer by depositing additional reactant vapor species comprising a Group III metal and nitrogen on the seed crystal.

63. (New) A bulk single-crystal $M^{III}N$ article produced according to the method of claim 62 wherein the article has a thickness of approximately 50 microns or greater.

64. (New) A single-crystal $M^{III}N$ article produced according to the method of claim 62, wherein the article is in wafer form having a thickness ranging from approximately 50 microns to approximately 1 mm.

65. (New) A single-crystal $M^{III}N$ article produced according to the method of claim 62, wherein the article is in boule form having a diameter of approximately 2 inches or greater and a thickness ranging from approximately 1mm to greater than approximately 100 mm.

66. (New) The method according to claim 40 comprising the step of using the single-crystal $M^{III}N$ layer as a seed crystal and depositing additional reactant vapor species comprising the Group III metal and nitrogen on the $M^{III}N$ layer to produce a bulk, homoepitaxially grown $M^{III}N$ article.